

## **MEMORANDUM**

**TO:** Governing Board Members

**FROM:** Kenneth G. Ammon, P.E., Deputy Executive Director,  
Everglades Restoration and Capital Projects

**DATE:** February 1, 2011

**SUBJECT:** Emergency Operations Center Data Management Center Improvements –  
Contract Number 4600001912-CO05

### **Background:**

The South Florida Water Management District (District) operates a Data Center, located in the Emergency Operations Center (EOC) building of its West Palm Beach headquarters. The Data Center supports all District information technology operations, including extensive databases, modeling, operations and communications. The Data Center is required to remain in operation for normal daily business activities through all storm events and during the recovery process following storm events. Located within the EOC, the Data Center operates on a common power supply with the EOC, which includes Operations Control, Security for all District facilities and the EOC when activated.

The EOC, Data Center, Operations Control Room and Security Office all rely on the same emergency backup power supply, consisting of two aging generators and a single Uninterruptible Power Supply (UPS). The generators and UPS were designed to meet the emergency power needs that existed at the time of construction. Growth of the Data Center has significantly increased the power demand for both commercial power and emergency power, resulting in the UPS operating above recommended capacity and the generators being incapable of meeting emergency power requirements. Interruptions to the commercial power supply have demonstrated the vulnerability of the Data Center and Operations Control to unplanned loss of power. District operation of control structures is entirely dependent upon the ability of the Operations Control Room to function under all conditions. The objectives of this project are to update the emergency power supply through adequately sized redundant generators and UPS, provide a generator enclosure building capable of withstanding the same design conditions as the EOC, and establish an on-site fuel storage for continuous operation for up to a two-week loss of commercial power.

A 210-day, \$1,340,535 construction contract for the project was approved by the Governing Board in October 2009 and a Notice to Proceed was issued to Ocean Gate General Contractors, Inc., in January 2010. During construction, change orders have been executed to account for additional project components not anticipated at the time of design and to account for the replacement of the project's electrical subcontractor

with a more qualified vendor. The current Governing Board approval is required, because the total change order value now will exceed \$500,000.

**How this helps meeting the District's 10-year Strategic Plan:**

This project will help Operations and Maintenance fulfill its flood control mission by facilitating the movement of water in a timely fashion during major storm events, regardless of availability of commercial power to the control room. It will also help Mission Support's Information Technology Department store critical database, modeling, operations and communications information utilized by the District. Approval of the latest change order number 5 will allow construction of the project to continue, with an anticipated availability for use prior to the 2011 wet season.

**Funding Source:** This is change order 5 to contract 4600001912 with Ocean Gate General Contractors, Inc., for the Emergency Operation Center's Data Management Center improvements in the amount of \$153,642.62 for which ad valorem funds are available, subject to authorization by the Governing Board of the transfer of funds within the District's FY10-11 budget on this month's consent agenda.

**This Board item impacts what areas of the District, both resource areas and geography:** This item will impact the Mission Support and Operations and Maintenance Programs by increasing the ability to store information and increasing reliability of the control room, respectively. The Everglades Restoration Construction Department is responsible for construction management of the contract. The Everglades Restoration Engineering Department is responsible for engineering during construction. Geographically, the area impacted is at the east side of the existing EOC Building at B-1 Headquarters, including the adjacent parking lot.

**What concerns could this Board item raise?** One concern related to the contract is the temporary reduction in parking spaces available east of the EOC Building while construction is taking place. In order to offset the reduction, staff has arranged for additional spaces to be available at Lake Lytal Park. Previous change orders extended the contract by a period of 237 days, increasing the down time of the east parking lot.

**Why should the Governing Board approve this item?** This action is needed to allow the District to continue to accomplish its flood protection mission during extreme storm events such as hurricanes, and any other conditions resulting in a loss of commercial power to the EOC, Data Center, Operations Control Room and Security Office.

KGA/as  
Attachment – Resolution